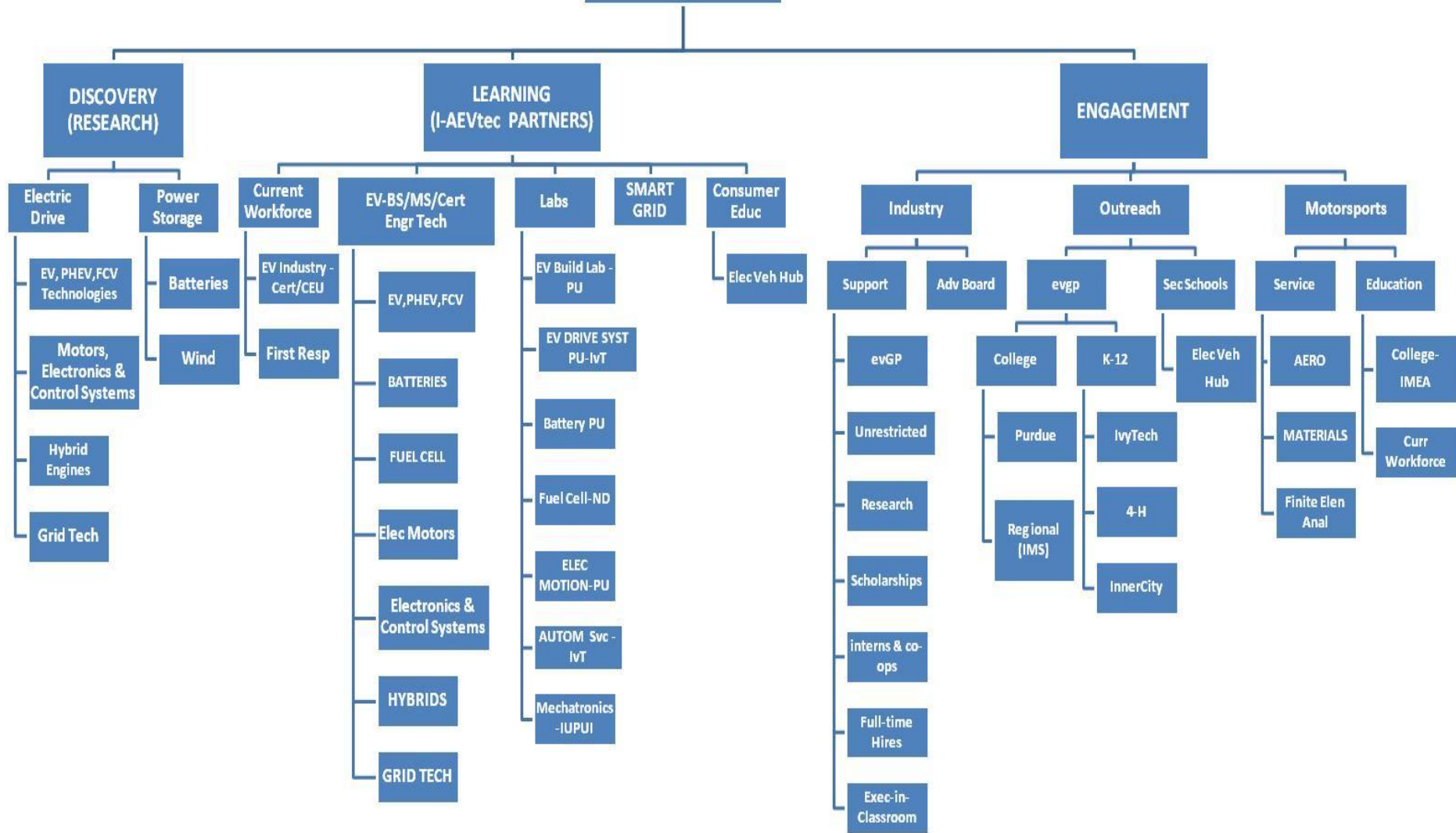


- Electric Vehicle Initiative - Consortium of Indiana technical universities/colleges (Indiana Advanced Electric Vehicle Training & Education Consortium (I-AEVtec))



- Workforce Development - Develop degree/certificate programs in technology and engineering for design, manufacture and maintenance of advanced electric vehicles (BS/MS/Certificates)
- Develop Certificate program in electric vehicle safety for emergency responders
- Produce web-enabled courses on batteries, fuel cells, electric motors and controls, hybrid engines, grid technology and consumer issues
- Establish the SmartEnergyHub - website for EV, PHEV and FCV technology
- Develop active partnerships with industry & government in advanced electric vehicles
- Engagement- Develop educational modules for secondary schools
- Develop an Electric Vehicle Grand Prix go- kart race to inspire students to commit to a career in electric vehicle technology

# Purdue Electric Vehicle Initiative



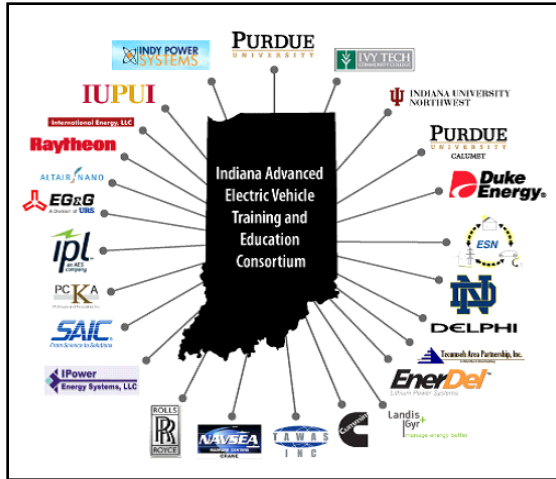


- Strategy and skill based – team dynamics
- Scoring -race, design, energy use, outreach
- 17 Teams/Karts = 100+100 Students 2000 fans
- 80 laps = 40 + 40
- Year 1- Purdue
- Year 2 – Big10 +
- Year 3 – National

<http://www.purdue.edu/newsroom/students/2010/101001CoiroStudents.html>

<http://www.youtube.com/watch?v=w3LQJKHAgg4&feature=channel>

# I-AEVtec



- Develop partnerships with industry and government in advanced electric vehicles to meet the needs and demands of employers

- Workforce development, summer interns, research focus and assist with the economic engine for Indiana and surrounding states.

- Larger deployment opportunities in support of research



PROJECT PLUG-IN

Commercial scale pilot of plug-in electric vehicles/ smart grid technology (Duke Energy, IPL, Nissan, Smart USA, Think, Navistar, Bright Automotive, Delphi Corporation, ITOCHU, IBM, EnerDel, Midwest ISO Simon Property Group Purdue , and the Rocky Mountain Institute



- Indianapolis Visit – May 2010
- Developing University Research Partnership/Ph.D. Exchanges
- Support Letter for Centre of Innovative Manufacturing in Digitally Optimised Lightweight Vehicles
- Discussing Joint Project Warwick-Purdue study of UK & US Motorsports: team dynamics, knowledge management, decision processes and risk assessment for accelerated design/development for mainstream manufacturing
- Contact: Dr. Nick Mallinson, WIMRC International Manufacturing Centre, The University Of Warwick



# Purdue Electric Vehicle Initiative

## What's Next?

- Workforce Development – College + Industry
- 2011 *Purdue evGrandPrix* + K-12 + Consumer Education + 4-H
- May 2011 Regional *evGrandPrix* Event - Indianapolis
- Campus Installation of 10-15 GE Electric Vehicle Charging Stations



- UL Certified - Level 2 (208-240 VAC) charging capability
- Charger and vehicle communication - NEC 625
  - Cord connection-SAE J1772
  - Indoor and outdoor enclosures/Wall and pedestal mount
  - Commerce and card reader capability
  - User authentication/Network communications
  - Revenue grade metering with AMI communications
  - LED lights and display

**“Energy Farm”**





- **Discovery**
- **Learning**
- **Engagement**



***Come Join us in 2011!***

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